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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/477,278	01/04/2000	RAYMOND TAH-SHENG HSU	PA000090	8966
23696	7590	04/22/2004	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			PHAN, TRI H	
			ART UNIT	PAPER NUMBER
			2661	
DATE MAILED: 04/22/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/477,278

Applicant(s)

HSU ET AL.

Examiner

Tri H. Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment/Arguments

1. This Office Action is in response to the Response/Amendment filed on February 6th, 2004. Claims 1-21 are now pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manning et al. (U.S.6,580,699).

- In regard to claims 1, 11, 16 and 21, Manning discloses in Figs. 1-2, 5 and in the respective portions of the specification about the system, method and means for establishing an Radio-Packet data serving node 'R-P' ("*Packet Data Services Network*", 'PDSN') connection where the mobile station 'MS' roams from the control of the old base station controller 'BS-O' to the new base station controller 'BS-N' ("*moving from first infrastructure element to the second infrastructure element*"; For example see Figs. 1-2; col. 1, lines 12-24; col. 3, lines 50-56) for establishing the point-to-point ('PPP') connection with the PDSN (For example see Col.

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3, Lines 50-56); the MS stores necessary information such as PPP indicator, session ID, cell ID, etc. (*"list of identifiers"*) and the related R-P connection, e.g. PPP session status (*"active or dormant state"*), and uses the registration message to send information about the PPP session status to the BS-N (*"transmitting the message from the mobile station"*; For example see Fig. 5; col. 2, lines 19-35; col. 5, lines 12-40) in order to construct the R-P connection when roaming into a new radio network. **Manning** fails to explicitly disclose about the *"number of network connections"* in the information transmitting to the new BS; however, **Manning** does disclose that the MS can have one or more session ID instances (*"IP instances"*) simultaneously (For example see col. 4, lines 18-28); therefore, it is obvious that the MS can send all the necessary information with the appropriated session IDs to the new BS, where the *"number of network connections"*, which is just the number counting from the session ID instances, are just the optional choices in the necessary transmitting information to the new BS. It is also obvious that the 'dormant' MS has *"dormant connections"* which provide by the PPP session status sent to the BS-N when roaming or idle (For example see Fig. 6; col.5, line 54 through col. 6, line 22).

- Regarding claims 2, 7, 12 and 17, **Manning** further discloses about the 'dormant' MS has PPP connections (For example see col. 6, lines 9-13).

- In regard to claims 3, 8, 13 and 18, **Manning** further discloses about the Packet data session nodes (*"first and second infrastructure elements are packet data service nodes"*; For example see Figs. 1-2; col. 3, Lines 32-41).

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- Regarding claims 4, 9, 14 and 19, Manning further discloses about the R-P indicator, PDSN ID, Pre_cell ID, session ID (*"the service reference identifiers"*; For example see Figs. 1-2; col. 4, lines 18-26).

- In regard to claims 5, 10, 15 and 20, Manning further discloses about the PPP session indicator storing in the MS (*"indicator"*; For example see col. 2, lines 19-27; col. 5, lines 12-23) where it is obvious that the 'dormant' MS has *"dormant network connections"* which provide by the PPP session status (*"active or dormant state"*) sent to the BS-N when roaming or idle (For example see Fig. 6; col.5, line 54 through col. 6, line 22; wherein the MS can have one or more session ID instances or connections simultaneously as disclosed in col. 4, lines 18-26).

- Regarding claim 6, Manning discloses in Figs. 1-2, 5 and in the respective portions of the specification about the system, method and means for establishing an Radio-Packet data serving node 'R-P' (*"Packet Data Services Network"*, 'PDSN') connection where the mobile station 'MS' roams from the control of the old base station controller 'BS-O' to the new base station controller 'BS-N' (*"moving from first infrastructure element to the second infrastructure element"*; For example see Figs. 1-2; col. 1, lines 12-24; col. 3, lines 50-56) for establishing the point-to-point ('PPP') connection with the PDSN (For example see Col. 3, Lines 50-56); the MS stores necessary information such as PPP indicator, session ID, cell ID, etc. (*"list of identifiers"*) and the related R-P connection, e.g. PPP session status (*"active or dormant state"*), and uses the registration message to send information about the PPP session status to the BS-N (*"transmitting the message from the mobile station"*; For example see Fig. 5; col. 2, lines 19-35; col. 5, lines 12-

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40) in order to construct the R-P connection when roaming into a new radio network. It is inherent that the MS has antenna ("*antenna*") for transmitting and receiving call. It is also obvious that the MS has the "*processor*" and memory ("*processor-readable medium*") in order to store necessary information sent to the BS-N or program ("*set of instructions*") in order to perform the modulation for the receiving/transmitting RF signal ("*modulating signal*") or performing methods as disclosed above. Manning fails to explicitly disclose about the "*number of network connections*" in the information transmitting to the new BS; however, Manning does disclose that the MS can have one or more session ID instances simultaneously (For example see col. 4, lines 18-28); therefore, it is obvious that the MS can send all the necessary information with the appropriated session Ids to the new BS, where the "*number of network connections*", which is just the number counting from the session ID instances, are just the optional choices in the necessary transmitting information to the new BS. It is also obvious that the 'dormant' MS has "*dormant connections*" which provide by the PPP session status sent to the BS-N when roaming or idle (For example see Fig. 6; col.5, line 54 through col. 6, line 22).

Response to Arguments

4. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Willkie et al. (U.S.6,230,012), **Azam et al.** (U.S.6,167,260) and **Chuah et al.** (U.S.6,496,491) are all cited to show devices and methods for improving the communication architectures for the mobile station when roaming in the data packet network, which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (703) 305-7444. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Olms can be reached on (703) 305-4703.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (703) 305-3900.



Tri H. Phan
April 16, 2004



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